

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Process~~ A process for the production of 4,4'-diaminodicyclohexylmethane (4,4'-HMDA) by catalytic hydrogenation of a mixture of ~~substances containing~~ comprising 4,4'-diaminodiphenylmethane (4,4'-MDA) as the main component and ~~its~~ a mono-N-methyl derivative thereof as a secondary component with increased selectivity with regard to the hydrogenation of 4,4'-MDA in the presence of a heterogeneous hydrogenation catalyst at a temperature in the range of 50 to 220°C and a hydrogen pressure in the range of 1 to 30 MPa,
~~characterised in that~~ wherein
the hydrogenation is terminated before a conversion of 4,4'-MDA to 4,4'-HMDA of 99% is achieved.

Claim 2 (Currently Amended): ~~Process~~ The process according to claim 1,
~~characterised in that~~ wherein
a crude MDA, ~~containing~~ comprising at least 70 wt.% 4,4'-diaminodiphenylmethane and 0.01 to 2 wt.% N-methyl-4,4'-diaminodiphenylmethane, is used as ~~the~~ said mixture of ~~substances to be hydrogenated~~.

Claim 3 (Currently Amended): ~~Process~~ The process according to claim 2,
~~characterised in that~~ wherein
~~the said mixture of substances to be hydrogenated contains~~ comprises 75 – 99 wt.% 4,4'-MDA, 1 – 11 wt.% 2,4'-MDA, less than 2 wt.% 2,2'-MDA and up to 1 wt.% N-methyl-4,4'-MDA.

Claim 4 (Currently Amended): ~~Process~~ The process according to ~~claims 1 to 3~~ claim 1,
~~characterised in that~~ wherein
the hydrogenation of 4,4'-diaminodiphenylmethane to 4,4'-diaminodicyclohexylmethane is terminated at a conversion in the range of 90% to 98.9%;
~~particularly 95 to 98%.~~

Claim 5 (Currently Amended): ~~Process~~ The process according to ~~claims 1 to 4~~ claim 1, ~~characterised in that~~ wherein the hydrogenation is performed at a temperature in the range of 90 to 150°C and a pressure in the range of 5 to 15 MPa.

Claim 6 (Currently Amended): ~~Process~~ The process according to ~~one of claims 1 to 5~~ claim 1, ~~characterised in that~~ wherein an Ru-supported catalyst with an Ru content of 0.5 to 10 wt.% is used.

Claim 7 (Currently Amended): ~~Process~~ The process according to ~~one of claims 1 to 6~~ claim 6, ~~characterised in that~~ wherein an Ru-aluminium oxide or Ru-titanium dioxide supported catalyst is used as the Ru supported catalyst, the support having a BET surface area of ~~preferably~~ less than 70 m²/g.

Claim 8 (Currently Amended): ~~Process~~ The process according to ~~one of claims 1 to 7~~ claim 1, ~~characterised in that~~ wherein the catalytic hydrogenation is performed in the presence of a solvent from the series of the ethers, ~~particularly tetrahydrofuran.~~

Claim 9 (Currently Amended): ~~Process~~ The process according to ~~one of claims 1 to 9~~
claim 1, ~~characterised in that~~ wherein the catalytic hydrogenation is performed in a
continuous operating method in a fixed bed reactor packed with an Ru supported catalyst,
wherein the reactor is operated by a trickle-bed method.

Claim 10 (New): The process according to claim 8, wherein the catalytic
hydrogenation is performed in a continuous operating method in a fixed bed reactor packed
with an Ru supported catalyst, wherein the reactor is operated by a trickle-bed method.